Sustainable Futures (SF) Summary Assessment

Using

P2 Framework Models

This document was developed to help compile estimation results from US EPA OPPT's P2 Framework Models www.epa.gov/oppt/p2framework/ and is used by OPPT during Sustainable Futures (SF) training www.epa.gov/opptintr/newchems/sustainablefutures.htm. Participants in the voluntary SF Pilot Project are asked to submit the information contained in this assessment along with their SF PMNs in their choice of format. This specific format is not mandatory. Insert data in cells and expand cells as necessary.

Last Updated: January 2004

Record ID	**CAS RN**
Structure	MW
	MF
	Physical Form
	Submitter
	Trade Name
	Use
	Production Volume
SMILES	
Chemical Name	
Synonyms	

SUSTAINABLE FUTURES SUMMARY			
CONCERN LEVEL	HIGH	MODERATE	LOW
Persistence			
Bioconcentration			
Carcinogenicity			
Non-Cancer Effects			
Aquatic Toxicity			
Is the chemical predicted to be a PBT by the PBT Profiler?			
Overall Toxicity Concern Level	Human Health	Aquatic	
Overall Risk Concern Level	Human Health	Aquatic	

PHYSICAL/CHEMICAL PROPERTIES	
Melting Point (deg C)	
Boiling Point (deg C)	
Boiling Point Pressure (mm Hg)	
Vapor Pressure (mm Hg)	
Water Solubility	
Log Kow	

ENVIRONMENTAL TRANSPORT AND FATE	
Transport	
Henry's Law Constant – HLC	
Soil Adsorption Coefficient – Koc	
Bioconcentration Factor – BCF	
Persistence	

Record ID	**CAS RN**
Experimental Biodeg Tests	
Ultimate Biodeg Model	
Primary Biodeg Model	
BOD or COD	
Atmospheric Half-life	
Hydrolysis Half-life	
Other Environmental Degradation	
Volatilization Half-life for Model River	
Volatilization Half-life for Model Lake	
Removal in Sewage Treatment Plant	
Ready Biodegradability	
Byproducts	
Degradation Products	
Metabolites	
ECOTOXICITY	
ECOSAR Class	
Acute Toxicity	
Fish LC50	
Daphnid LC50	
Green Algae EC50	
Other Acute Values	
Chronic Toxicity	
Fish ChV	
Daphnid ChV	
Green Algae ChV	
Other Chronic Values	
Overall Aquatic Toxicity Concern Level	
CANCER HEALTH EFFECTS	
Experimental data	
OncoLogic Results	
Overall Carcinogenicity Concern Level	
NON-CANCER HEALTH EFFECTS	
Acute Toxicity	
Irritation	

Record ID			**CAS RN**
Skin Sensitizer			
Reproductive Effects			
Developmental Effects			
Immune System Effects			
Genotoxicity			
Mutagenicity			
Systemic Effects			
Overall Concern Level for Non-Cancer Health Effects			
EXPOSURE MODELS			
INDUSTRIAL RELEASE AND EXPOSURE VALUES: CHEMSTEER			
Process		Release Days per Year	
SIC Code / NPDES #		Number of Facilities	
Process		Release Days per Year	
SIC Code / NPDES #		Number of Facilities	
Process		Release Days per Year	
SIC Code / NPDES #		Number of Facilities	
Occupational Exposure Values			
	Cancer LADD	Chronic ADD	Acute APDR
Dermal			
Inhalation			
Environmental Release Values			
Release to Water			
Release to Air (Fugitive)			
Release to Landfill			
Release from Incineration			
Other Release Activities			
GENERAL POPULATION EXPOSURE VALUES: E-FAST			
Aquatic Exposure			
Predicted Environmental Concentration (PEC)			
PEC Exceeds COC (days / year)			
Human Exposure			
	Cancer LADDpot	Chronic ADDpot	Acute ADRpot
Drinking Water			
Fish Ingestion			

Record ID			**CAS RN**
Fugitive Emissions			
Incineration Emissions			
Landfill Leaching			
Dermal – Consumer Use			
Inhalation – Consumer Use			

RISK ASSESSMENT	
MOE – Occupational Exposure	
MOE – Acute General Population Exposure	
MOE – Chronic General Population Exposure	
Acute COC – Acute Aquatic Exposure	
Chronic COC – Chronic Aquatic Exposure	

RISK CONCLUSIONS	
Risk from Occupational Exposur:	
Acute Risk to General Population	
Chronic Risk to General Population	
Acute Risk to Aquatic Environment	
Chronic Risk to Aquatic Environment	

Table 1 - Selected Analogs

Analog	Structure	Concern Identified	Basis of Concern	Concern Level

References
Definitions and Abbreviations

COMMENTS
Physical Properties
Environmental Transport and Fate
Cancer Health Effects
Non-Cancer Health Effects
Aquatic Toxicity
Aquatic Exposure
Environmental Release(s)
Human Exposure

Record ID	**CAS RN**
Cancer Health Risk	
Non-cancer Health Risk	
Aquatic Toxicity Risk	